

CENTRAL INTELLIGENCE AGENCY
INFORMATION REPORT

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This is UNEVALUATED Information

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
 THE APPRAISAL OF CONTENT IS TENTATIVE.

1. The Spolana National Enterprise plant in Neratovice (N50-16, EL4-31) developed originally out of the Saponka factory, which manufactured soap and vegetable shortenings. This factory stopped operation, and its buildings are now used as a storehouse of Spolana. Construction of the buildings of Spolana began in 1942, and by 1945 approximately one third of the work was completed. Construction continued after the war and expanded further in 1950. In 1954, the plant was about three times as big as in 1945. Construction is still going on. The most important building for production of sulphuric acid is still under construction. 25X1

2. The plant is located south of Melnik, near Neratovice. To the east it is bounded by the Elbe River, to the south by the northern boundaries of Neratovice, with the railroad station and railroad line that runs west toward Prague. To the south of the plant, north of the Neratovice railroad station in the loop of the railroad line, lies the original Saponka factory. A field path from Neratovice to the village of Libis runs along the west and southwest sides of the plant and joins the asphalt highway near the southern boundaries of Libis. A cluster of houses for Spolana workers is located at the northwestern tip of the plant and runs south toward Libis. To the north, along the Elbe, are fields. The east side of the plant, along the Elbe River, is approximately 1,000 meters long; its south side is up to 1,000 meters wide, and the fence on this side is about 400 meters north of the Saponka factory. The west side of the plant forms a slight curve. The plant occupies an area of about one square kilometer.

3. All machines of the plant are in excellent condition and mainly of post-war manufacture. Maintenance is good. The electrolysis department has new equipment, manufactured between 1949 and 1953. Almost all of it, except the electric installation, came from East Germany. Electric installations are of Czech production, 25X1

4. Production:

a. Caustic soda (NaOH) is produced in the electrolysis department. Output of sodium hydroxide depends on the quantity of available electric current, which

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TE: Washington distribution indicated by "X"; Field distribution by "X".

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is irregular. In the winter of 1953-1954 the supply was insufficient and production was far below capacity. The average capacity of one bath is 220 kg. of NaOH in 24 hours. With an average of 190 baths operating out of the total of 200, production capacity is 41,800 kg. in 24 hours. With regular supply of electric current, production could be increased at least 10 percent. Although current is never switched off completely, its voltage sometimes substantially decreases. The best supply of electricity is from midnight to 3 am, and the critical point is from 6 am to 9 am. The sodium hydroxide is drawn off to containers in the ground floor, and part of it is then drawn into containers used for the production of artificial threads. Only low-grade sodium hydroxide is used for this production. Other uses of caustic soda: The NaOH is transferred in tankers to Lovosice (N50-31, E14-04), where it is used in the production of artificial silk, to Varnsdorf (N50-55, E14-37), where it is used in stocking manufacture, and to Vlasim (N49-42, E14-54), and Semtin (N50-05, E15-44), where it is used in the production of high explosives.¹ Part of the NaOH is also exported to other satellite countries, chiefly to Hungary, by railroad tank car.

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- b. Artificial, spider-thin, snow-white threads are produced which are highly explosive and are used in the production of artificial silk. Finished products are shipped in spools to Lovosice and other textile factories.
 - c. Hydrochloric acid is produced as a by-product from waste brine.
 - d. Sulphuric acid (H_2SO_4) has been produced in the fertilizer department. A new building was under construction for production of sulphuric acid on a much larger scale, to commence in autumn 1954.
 - e. Production of several kinds of fertilizers was started during the war.
 - f. Glue, bone meal, gelatine, and Dynocyd are also produced at the factory.
5. Almost all raw materials and all finished products are shipped by rail. Nine to twelve cars of salt are imported daily from East Germany for the electrolysis department. Cardboard, which is the basic raw material for the production of artificial threads, comes from the cellulose plant in Zilina. This cardboard was called "cellular tissue". Bones for the production of glue, bone meal, and gelatine are supplied by the Collecting Center for Waste Material, National Enterprise. Seventy to eighty cars of small-lump brown coal are brought daily from the Most coalfields.
 6. The departments of electrolysis and of artificial threads, which are of greatest importance, never exceeded the plan. They fulfilled the plan usually 90 percent. Less important departments, such as the glue and gelatine shops, fulfilled the plan 100 percent. Incomplete fulfillment of the plan in the department of electrolysis was due chiefly to shortage of electric current, which caused insufficient production of sodium hydroxide used in the department of artificial threads.
 7. Electric current is probably supplied by the Ervenice (N50-31, E13-32) power plant. Part of it is produced in the Spolana boilerhouse, and some is supplied by the hydroelectric generating station on the Elbe. According to the latest ruling, all current produced in any plant has to be supplied to the public electric grid and only such amount of it taken by the plant as has been put in. This is to prevent factories from having an unused surplus of their own current. This order did not improve the general supply of current during critical periods.

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8. The number of employees is constantly increasing with the completion of new branches of the plant. In June 1954 employees totalled around 6,000. Twenty-five to thirty percent of the employees are women. Only 15 percent of the employees are specialists who have been working in the plant at least five years. A large number have been transferred here from other activities, e.g., farmers, craftsmen, tradesmen, clerks, and former SNB employees. The average age of Spolana employees is around 30-35 years. Inhabitants of the Melnik area either work in the Spolana factory or in the mines. In 1953 employees of this area were hired only by Spolana, but in 1954 the local labor recruitment drive probably failed, as workers were needed in agriculture. Most employees of Spolana come from the Melnik area and some from the Brandys nad Labem (N50-11, EL4-40) and Kralupy (N50-14, EL4-19) areas. No employees may transfer to another branch of industry, except to mines. They may leave the plant only for health reasons. Approximately 90 percent of the employees are politically unreliable from the point of view of the present régime, as they enjoyed much better living conditions in their previous employments.
9. Workers in the electrolysis and artificial threads department, the boilerhouse, water works, fire brigade, and works guard work 12 hours a day. Work in these branches goes on without intermission in two shifts, 12 hours of work being followed by 24 hours of free time, regardless of holidays. At a Works Council meeting in March 1954 it was suggested to switch to an 8-hour working day and to divide work into three shifts. New employees would have to be hired, which would mean a reduction of present wages. These measures are probably caused by signs of unemployment. The Kladno mines, for example, have been refusing to hire new employees since April 1954. The administrative department works only one shift, from 6 am. to 2 pm. Other branches of Spolana work two shifts, from 6 am. to 2 pm. and from 2 pm. until 10 pm.

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11. Morale is rather low. Everybody tries to get through his task without the slightest interest in quality. Employees are not making "socialist pledges", nor are they offering improvement suggestions. Unexcused absenteeism is practically nonexistent. Medically justified absenteeism reached 12 to 14 percent.
12. The plant has a very well equipped infirmary, cloakrooms, and washrooms. A housing development for workers called "Na skalkach" is under construction near the village of Mekojedý. Single employees live in a camp at the southern edge of the plant consisting of temporary brick huts, approximately 20 x 10 meters in size.
13. Access to the factory is allowed only to holders of passes. These are yellow cards in celluloid covers with a photograph of the holder. Employees of other departments have no access to the department of electrolysis, to the boilerhouse, or to the water works. Two members of the works guards, armed with pistols, inspect these passes at the main entrance, and two works employees inspect them at the secondary gate. The works guards have about 70 members. They patrol the plant day and night. At night they are armed with submachine guns.

1. Comment: The references are presumably to Czech Silk (Ceske hedvabi), National Enterprise, in Lovosice, Elite National Enterprise in Varnsdorf, Zbrojovka Brno, National Enterprise, Vlasim plant in Vlasim, and Synthesia National Enterprise in Senti.

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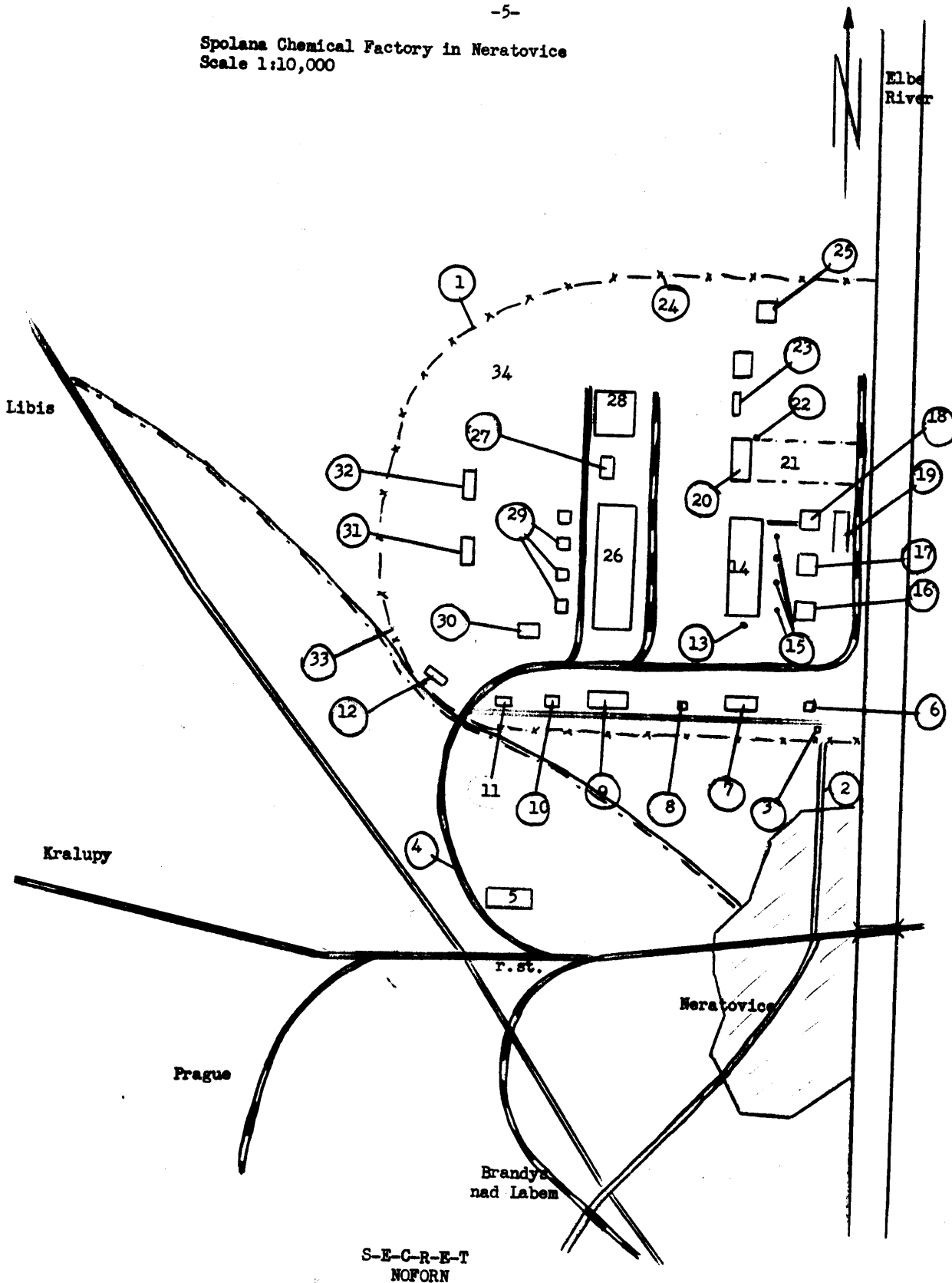
Annex A

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Spolana Chemical Factory in Neratovice
Scale 1:10,000



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Legend to Annex A

1. Fencing: Except for the east side by the Elbe River, the whole plant is surrounded by a wire fence, on concrete posts, about two meters high.
2. A connecting road runs along the east bank of the Elbe and connects the plant with Neratovice.
3. Main guardroom and entrance: The main guardroom is a brick building, 12 x 6 x 4 meters large, where the road opens into the plant, some 100 meters west of the Elbe. This building also contains the personnel and cadre departments.
4. Sidings run from the Neratovice station around the Saponka factory building eastward and enter the factory on the southwest; one track runs along the Elbe; the second branches around the artificial-threads hall, and a third runs along the south of the fence.
5. Saponka plant: The original plant at Neratovice, Saponka, is located approximately 400 meters south of the southwestern tip of Spolana. It is now used as a storehouse of Spolana. Saponka is a brick building, 100 x 40 x 12 meters in size.
6. Saccharin department: This is a six-story brick building of ferroconcrete frame in the southwest tip of the plant, near the Elbe. It has large windows, 12 x 12 meters, and was constructed during the war. Saccharin production is centered here.
7. Main repair shop: The main repair-shop building is brick, 70 x 30 x 7 meters, and is used for repairs of machines and material.
8. The old boiler house: Lies west of the main repair shop and is 8 x 8 x 7 meters in size. It consumes two car-loads of coal daily.
9. Production of Dynocyd: This building has three stories and is 80 x 30 x 20 meters large. It is a brick building of ferroconcrete frame, built after 1945. Dynocyd is an insecticide used mainly against the Colorado beetle. Offices of Dynocyd production are on the ground floor, west of the hall. The offices of the chief engineer of the main repair shop are also in this part.
10. Antiaircraft shelter: Constructed during the war. It lies west of the Dynocyd production hall.
11. Locomotive shed: With four small steam locomotives; brick, 14 x 10 x 6 meters large.
12. Infirmery: A single-story building completed in October 1953. It is very well equipped; during the day two doctors and at night one are always on duty.
13. New hydrogen gas container: Between the main repair shop and the electrolysis department; put into operation at the end of February 1954. Its shape is cylindrical, of 10 meters diameter and 14 meters high. Its base is at ground level; its sides are covered with earth.
14. Department of electrolysis: A brick hall with ferroconcrete frame and a large number of windows. It has only two stories but is much larger than most of the buildings. The hall is about 220 meters long, 70 meters wide, and 25 meters high. This department went into operation in October 1953, although one third of it was put into operation in 1949. Its walls and supporting pillars are 60 centimeters thick. The ferroconcrete reinforced ceiling and floor of the second floor are 90 centimeters thick. (See Annex B)

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15. Tanks: Along the eastern side of the electrolysis hall are four tanks with earth. The two in the south are hydrogen containers, and the two in the north are brine tanks.
16. Hydrogen combustion furnaces: East of the electrolysis hall stands a two-story brick building with ferroconcrete frame 35 x 35 x 12 meters large. It contains six hydrogen combustion furnaces.
17. Department of liquid chlorine and hydrochloric acid: North of the building at Point #16 is an identical building, where chlorine is liquified and hydrochloric acid produced.
18. Brine production: In the last building in this row, identical with the above, brine is prepared. It contains concrete tubs, where salt and barium are added to water. The actual brine is then piped into two containers and pumped through special pipes to the electrolysis department.
19. Store of salt: East of the buildings at points No. 18 and 17, a concrete building 70 x 30 x 12 meters large. Under its roof is a bridge crane which smoothes the salt and transports it to a conveyor belt which leads into the brine production department. A siding leads to this building.
20. New main boilerhouse: Included in the Five-Year Plan (1948 - 1953). A brick structure of ferroconcrete frame. It appears to be a three-story building and is about 100 meters long and 40 meters wide. It also contains the machine shop. Employees of other departments have no access here.
21. Chimney: At the northeast corner of the hall. It is the main chimney for all fumes of the chemical production. Brick; its diameter at its base is five meters, height 40 meters.
22. A large coal dump lies between the railroad tracks and the boilerhouse. Above it is a traveling shovel crane, which transports coal to the conveyor belt leading to the boilers. In winter daily consumption of coal is 70-80 carloads of brown coal.
23. Water works: This is a brick structure with concrete frame, 40 x 20 x 12 meters in size, north of the boilers; it was constructed after the war. Water, which is pumped from the Elbe, is filtered and pumped to different points in the factory. Entry to this building is forbidden.
24. Glue shop: Somewhat larger than the water works. A new building. Employees are transferred here as punishment.
25. Gelatine shop: Approximately of the same size as the glue shop. It was put into operation in 1945.
26. Artificial-threads shop: The largest hall of the plant. Most of it was put into operation during the Five-Year Plan (1948 - 1953). It is of brick with a ferroconcrete frame, 250-280 meters long and 80 meters wide, with four stories. On top of its north end is a ventilator tower, approximately 20 meters high. This hall has the most modern equipment. White, very fine artificial threads are added to "artificial silk". In the southeast of the hall, on the fourth floor, are offices of the manager, chief engineer, Communist Party Secretariat and Works Council. On the ground floor, in the south of the hall, is a store of artificial threads. Along the east of this department is a row of five sodium hydroxide containers of cylindrical shape, diameter four meters, six meters high. These containers are connected with halls of this department by pipes.

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27. Fertilizer production: Along the north of the artificial-threads building and identical in structure, 40 x 20 meters large, four stories. Several kinds of fertilizers, as well as sulphuric acid (H_2SO_4), are produced.
28. A new hall for sulphuric acid production, under construction, was to be much larger than the previous one. The entire production of sulphuric acid was to be transferred here, probably in autumn 1954.
29. Maintenance shops: A line of four single-story, brick structures, each 8 x 6 x 5 meters in size; contains joinery, electrical, painting, and sheet-metal shops as well as tool rooms.
30. Works kitchen and canteen: A single-story building. West of the hall at Point #26 and south of the maintenance shops, brick, 50 x 30 x 8 meters large.
31. Fire station: A three-story building, 40 x 20 meters in size. On the other two floors are firemen's billets.
32. Central administration building: Of the same size as the fire station. Contains the plant offices.
33. Secondary guardroom and gate: Along the west side of the fence, used by employees from Libya and surrounding villages to save time; for pedestrians only.
34. Building sites of additional factory buildings in the northwest part of the plant.

Apart from the above buildings the plant includes a considerable number of smaller factory buildings which are difficult to describe.

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Annex B

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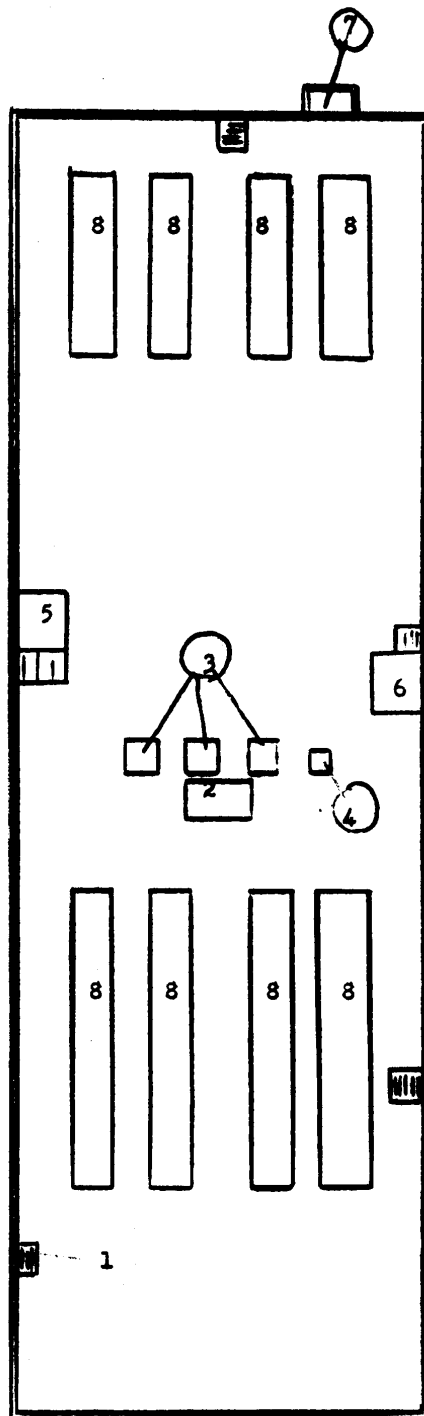
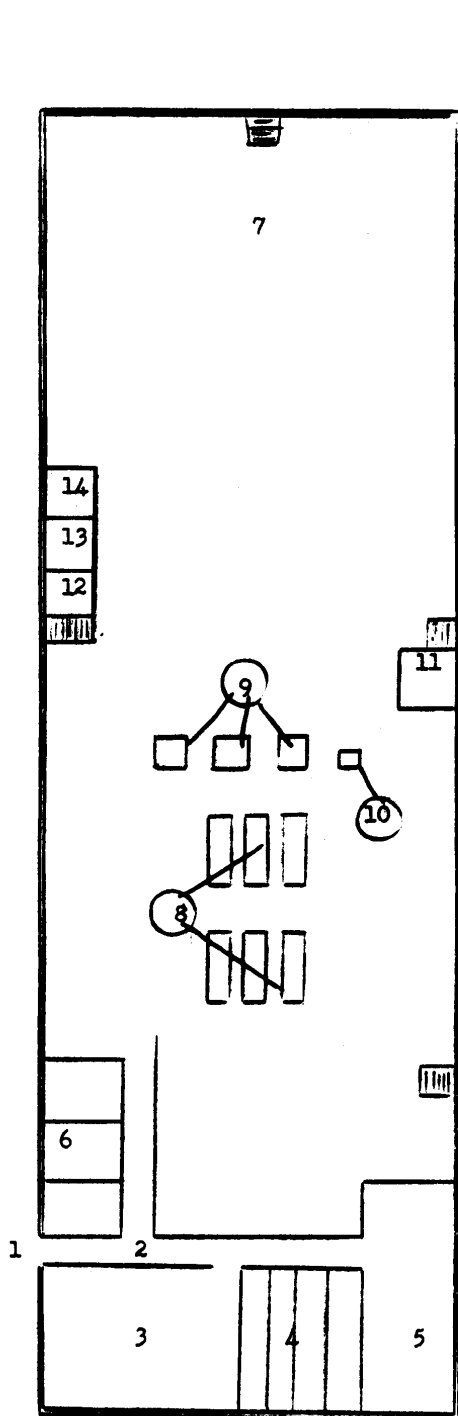
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Electrolysis Department

Scale 1:1,000

Ground Floor

Second Floor



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Legend to Annex B

Ground floor:

1. Main entrance: The main entry into the ground-floor hall.
2. Corridor: From the entry in an easterly direction; another corridor branches out from it along the west side approximately one quarter of the way down the hall.
3. Dining room: Used for morning and afternoon breaks. Lunches and dinners are served in the works canteen.
4. Lavatories.
5. Wages, accounts department: Also serves as an office of the time-study engineer and the planner.
6. Cloakrooms and baths.
7. The hall itself: The hall takes up practically the whole ground floor, which is approximately seven meters high. On the ceiling is a row of pipes; these are for inlet of brine, outlet of exhaust brine, water inlet, outlet for sodium hydroxide, and chlorine and hydrogen outlet. On the ceiling are also high-ampere wires in insulating holders. All these pipes and leads are connected through the ceiling with the actual production hall on the second floor. The ground floor has very few machines and equipment and is really a store of spare pipes and parts.
8. Sodium hydroxide containers: In the south part of the hall are six sodium hydroxide containers, metal, cigar-shaped, $3\frac{1}{2}$ meters in diameter and 12 meters long.
9. Chlorine ventilators: Approximately in the center of the hall are three chlorine electrical ventilators, which pump away chlorine from the second floor and run it through pipes to the liquid chlorine department; surplus chlorine is let out through the main chimney.
10. Hydrogen station: This is the most dangerous part. It is a steel cylinder, of one-meter diameter, from the ground to the ceiling. In the center of it is a glass portion, in which the water tap, preventing access of air, is constantly watched. This hydrogen station pumps away hydrogen and conveys it to combustion furnaces.
11. Maintenance shop.
12. Office of the foreman of electrolysis: A brick office, along the west side of the hall.
13. Office: Of the engineer in charge of the electrolysis department and his assistant.
14. Laboratory: For testing products.

Second floor: The real production goes on here. It has a ferroconcrete floor 50 centimeters thick and is approximately 15 meters high.

1. Entry to the second floor: Six ferroconcrete staircases lead to the second floor.
2. Opening in the ceiling: In the center of the floor of the second floor is an open space, about 10 x 6 meters large, through which various articles are hoisted. A smaller electrical crane of 1,500 kg. capacity travels on rails above the open space.

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3. Ventilators: Three ventilators with regulation equipment, which draw away the chlorine.
4. Pressure control device: Called "Askalka", used for observing the pressure of hydrogen. It is connected to a hydrogen pump.
5. Foreman's office: 6 x 4 meters.
6. Smoking room and cloakroom for shift workers.
7. Transformer room: For the whole electrolysis department in an annex on the level of the second floor, 10 x 7 meters in size.
8. Baths: Four rows, each with 20 metal tubs, 7 meters x 1.20 meters x 40 centimeters, on concrete stands approximately 50 - 60 centimeters high, which contain electrical equipment for analysis. Pipes for inlet of brine and water, pipes for drawing off chlorine and hydrogen, and outlet pipes for used brine and prepared sodium hydroxide lead into these baths. There are another four rows of baths for production of sodium hydroxide. Each row has 30 metal tubs of the same dimensions as above.

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